

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S. Patent Application)

Applicant: Koganezawa et al.)

Serial No.)

Filed: December 19, 2001)

For: PIEZOELECTRIC ACTUATOR)

Art Unit:)

I hereby certify that this paper is being deposited with the United States Postal Service as EXPRESS MAIL in an envelope addressed to: U.S. Patent & Trademark Office, P.O. Box 2327, Arlington, VA 22202, on this date.

12-19-01

Date

Doil Aman
Express Mail No. EL 846222898 US

PRELIMINARY AMENDMENT

Box Patent Application
U.S. Patent and Trademark Office
Arlington, VA 22202

Dear Sir:

Prior to examination of this application and calculation of the filing fee, please amend the application as follows:

In the Claims:

Please amend claim 18 as follows:

17. (Amended) A piezoelectric actuator, comprising:

a movable member to which a head suspension is fixed;

a fixed member being fixed to a carriage arm;

a plurality of piezoelectric elements being provided between said movable member and said fixed member, said piezoelectric elements being capable of adjusting a position of the head suspension by their deformation;

10025013 12-19-01

a first electrode member being provided between said fixed member and said piezoelectric elements; and

a second electrode member being provided between said movable member and said piezoelectric elements,

wherein said first electrode member includes a pair of cable patterns, which are electrically connected to electrodes of each of said piezoelectric elements, and terminals, which are formed in a side edge of said fixed member and can be connected to a flexible printed circuit, and

said second electrode includes a terminal, which is electrically connected to one of the cable patterns connected to one of the electrodes of each said piezoelectric elements when said piezoelectric elements are sandwiched between said first electrode member and said second electrode member.

REMARKS

This amendment corrects a typographical error in the application.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By 

Patrick G. Burns
Registration No. 29,367

December 19, 2001

300 S. Wacker Drive – Suite 2500
Chicago, Illinois 60606-6501
Telephone: (312) 360-0080
Facsimile: (312) 360-9315

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Please amend claim 18 as follows:

17.[18] (Amended) A piezoelectric actuator, comprising:

- a movable member to which a head suspension is fixed;
- a fixed member being fixed to a carriage arm;
- a plurality of piezoelectric elements being provided between said movable member and said fixed member, said piezoelectric elements being capable of adjusting a position of the head suspension by their deformation;
- a first electrode member being provided between said fixed member and said piezoelectric elements; and
- a second electrode member being provided between said movable member and said piezoelectric elements,

wherein said first electrode member includes a pair of cable patterns, which are electrically connected to electrodes of each of said piezoelectric elements, and terminals, which are formed in a side edge of said fixed member and can be connected to a flexible printed circuit, and

said second electrode includes a terminal, which is electrically connected to one of the cable patterns connected to one of the electrodes of each said piezoelectric elements when said piezoelectric elements are sandwiched between said first electrode member and said second electrode member.